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EXAMINER
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RODRIGUEZ, ARMANDO

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/823,653  
Filing Date: April 14, 2004  
Appellant(s): CHOI ET AL.

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Shawn B. Cage  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed October 25, 2007 appealing from the Office action mailed May 11, 2007.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6,798,807                      NAKAMURA et al                      9-2004

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakamura et al (US 6,798,807).

Regarding claims 1, 9.

Figures 1 and 2 illustrate a semiconductor laser including a mesa (33) having a resonance layer (6), a substrate (2), cladding layers (5) and (7), rounded corners formed by isolation region (32) which are connected to the substrate (2), a current injection ridge (16), a passivation layer (10) and force distribution ridges (not numbered) on the sides of the ridge (16) which are on the upper portion of the mesa (33) and protrude from the upper surface of the mesa.



The appellant further argues, because the term “corners” is plural the claim recites more than one corner of the mesa structure is connected to the substrate and that Nakamura et al shows only one trench connected to the substrate, as a result , the area (33) only has one corner, which is defined by trench (32) that connects to the substrate. The examiner has provided a copy of figure 1, which illustrates the isolation trench (32) formed from the front of the semiconductor laser towards the back, where the arrows provided by the examiner indicate a front corner and a back corner. Thereby, the semiconductor laser of Nakamura et al does have “corners” connected to the substrate.

The appellant finally argues, the inventions of claims 1 and 9 are not anticipated by the applied art because: (1) the applied art does not appreciate the problem identified in the present application, (2) does not suggest that rounded corners provide a solution to any problem, such as preventing concentration of a scribing force, (3) no supporting disclosure suggesting that the curve in the line at the corner was intentional or actually apparent in the device as designed or made, (4) that the present claims require the corner to be “rounded”, which would exclude minor transitional gradients due to etching tolerances.

(1) Appellant’s attention is directed to MPEP 2131.05, which discloses (The question of whether a reference is analogous art is not relevant to whether that reference anticipates. A reference may be directed to an entirely different problem than the one addressed by the inventor, or may be from an entirely different field of endeavor than that of the claimed invention, yet the reference is still anticipatory if it explicitly or inherently discloses every limitation recited in the claims.). The cited reference of Nakamura et al explicitly discloses every limitation recited in claims 1 and 9.

(2) Figures 1 and 2 illustrate the isolation trench (32), where the formation of the trench includes the formation of the rounded corners in the front and the back of the semiconductor laser, as the trench provides isolation within the semiconductor laser. Furthermore, in accordance with MPEP 2111.01 II IT IS IMPROPER TO IMPORT CLAIM LIMITATIONS FROM THE SPECIFICATION, which discloses “Though understanding the claim language may be aided by explanations contained in the written description, it is important not to import into a claim limitations that are not part of

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the claim.” Therefore, appellant’s intent to limit rounded corners by importing from the written description the functional limitation of “preventing concentration of a scribing force” is improper.

(3) Figures 1 and 2 clearly illustrate the formation of the isolation trench having a rounded geometrical shape as intentional.

(4) Claims 1 and 9 are product claims and recite the limitation of "rounded corners", thereby the claims are limited to the structure recited and not to any particular process nor to exclude any particular process, as implied by appellant.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner’s answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/ARMANDO RODRIGUEZ/

Primary Examiner, Art Unit 2828

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